Draft Interim Action Work Plan
Seafarers' Memorial Park Bank Stabilization
Former Scott Paper Company Mill Site
Anacortes, Washington

August 19, 2004

Prepared for

Port of Anacortes
Anacortes, Washington

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1.0 INTRODUCTION

The Port of Anacortes (Port) intends to perform an interim action bank stabilization project at Seafarers' Memorial Park, which is within the uplands area (Uplands Area) of the northern portion of the former Scott Paper Company mill site (Property) in Anacortes, Washington (see Figures 1 and 2).

A Remedial Investigation/Feasibility Study (RI/FS) of the Uplands Area is being conducted under Consent Decree No. 03 2 00492 1 between the Washington State Department of Ecology (Ecology) and the Port for the Property (Consent Decree; Ecology 2003). The RI/FS is currently being implemented by the Port in accordance with the Uplands Area RI/FS Work Plan (RI/FS work plan, Landau Associates 2003) and work plan addendum (Landau Associates 2004). A marine area RI/FS will also be implemented in accordance with a work plan approved by Ecology.

A portion of the shoreline bank at Seafarers' Memorial Park is currently eroding. The area of concern is located east-northeast of the Park Building and appears to be undergoing intermittent erosion events during periods of high to extremely high water levels and wave action. The purpose of the interim action bank stabilization is to temporarily protect the upper shoreline, the Park Building, and the beach area (all used by the public year round) from further erosion, which could eventually result in exposure of potentially contaminated Upland Area fill materials, until a more permanent means of protection can be studied and implemented, as determined necessary as part of the Marine Area RI/FS.

The interim action will be conducted under the Consent Decree after this interim action work plan, prepared in accordance with Ecology's Model Toxics Control Act regulations (MTCA; WAC 173-340-430), is approved by Ecology.

1.1 SITE LOCATION

The site is located on Port property at Section 19, Township 35 North, Range 2 East, (Latitude 48° 30'N, Longitude 122° 36'W) at Seafarers' Memorial Park, which is located along the eastern portion of the Uplands Area and at Fidalgo Bay and the Cap Sante Waterway in Anacortes, Washington (see Figures 1 and 2).

The Uplands Area is bordered by property owned by MJB Properties, Inc., to the south; Fidalgo Bay to the east; Cap Sante Waterway and Cap Sante Boat Haven to the north; and Q Avenue to the west. The Uplands Area is located on the northern portion of the former Scott Paper Company mill site. The Uplands Area consists of three subareas referred to as Parcels 1, 2, and 3 (shown on Figure 2). The uplands portion of Seafarers' Memorial Park, owned by the Port, is located on Parcel 3. Parcel 1, currently undeveloped, is also owned by the Port. Parcel 2 is currently owned by Shared Healthcare

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Systems, Inc. (SHS) and is comprised of the SHS office buildings, parking, and landscaped areas. Parcel 3 consists of Seafarers' Memorial Park and asphalt-paved roads and parking areas.

1.2 REPORT ORGANIZATION

Section 2.0 of this report presents a summary of project area background information. Section 3.0 presents the evaluation and discussion of the interim action. Section 4.0 summarizes the use of this report. Section 5.0 presents the references for this document.

2.0 BACKGROUND INFORMATION

This section briefly summarizes project area background information, including existing site features, site history, geology and hydrogeology, and environmental site conditions.

2.1 EXISTING SITE FEATURES

The interim action bank stabilization project is located along the shoreline of Seafarers' Memorial Park, which is situated southeast of the Cap Sante Boat Haven just outside the marina breakwater. A portion of the shoreline bank located east-northeast of the Seafarers' Memorial Park Building is eroding (see the photographs in Appendix A). A grass lawn is located between the existing sidewalk and shoreline. Surficial soil in the shoreline area is primarily granular material with significant amounts of wood debris. A portion of the shoreline located southeast of the Park Building and just south of the eroding shoreline is currently stabilized with riprap placed when the Park pier and boat launch float system was installed.

The location of the planned shoreline bank stabilization area, the Park Building, and other existing site features are shown on Figure 2, Sheet 2, and Drawing 2 in Appendix B.

2.2 SITE HISTORY

Historic activities at the Property included sawmill operations and activities related to the pulp mill, which was located on the southern portion of the former Scott Paper Company mill site (Site). Historical activities at the Property and on the southern portion of the Site, including ownership and plant operations, have been described in detail in other documents (ThermoRetec 1999; E&E 2000) and are summarized in Section 2.1 of the *Comprehensive Evaluation of Existing Data, Former Scott Paper Mill Site, Anacortes, Washington* (*Comprehensive Evaluation Report;* Anchor 2002). Historical records indicate that features at the Property included two storage sheds, a chip shed, chip bins, fuel bins, a dry kiln, a refuse burner, a boiler room, a smokestack, aboveground petroleum tanks, and numerous docks and piers.

The mill was closed in 1978 and the mill properties subsequently sold. Over time, some development has occurred that included demolition of the buildings, placement of fill material, and removal of pulp and woody debris.

2.3 GEOLOGY AND HYDROLOGY

The subsurface geology at the Uplands Area consists of multiple layers of fill overlying native marine sediment and glacial deposits. The fill consists of gravel and sand mixed with layers of wood

debris. The thickness of the wood debris ranges from less than a foot to 15 ft, with the thickest layers generally occurring near the Fidalgo Bay shoreline (Anchor 2002). The native layer underlying the fill material consists primarily of silt and clay. The top of the native layer is situated at approximately 10 ft above mean lower low water (MLLW) at inland locations, and at elevations of 0 to -10 ft MLLW near the shoreline.

Based on data collected during previous investigations, groundwater at the property generally occurs within the fill/wood material above the native silt deposits (ENSR 1993; ThermoRetec 1999; Anchor 2002) and is expected to be encountered at depths between 3 and 12 ft below ground surface (BGS). Groundwater in the vicinity of the Uplands Area generally flows eastward and discharges to Fidalgo Bay (ThermoRetec 1999; E&E 2000; Anchor 2002).

2.4 ENVIRONMENTAL SITE CONDITIONS

Available soil and groundwater quality data associated with previous Uplands Area investigations are summarized in the Uplands Area RI/FS work plan (Landau Associates 2003). This includes relevant data obtained during previous investigations and remedial actions at the former Scott Paper Company mill site that were compiled and evaluated in the *Comprehensive Evaluation Report* (Anchor 2002). An RI/FS is currently in progress in accordance with the work plan (Landau Associates 2003) and addendum (Landau Associates 2004) approved by Ecology.

Based on Uplands Area investigations, contaminants that may be present in soil at concentrations above screening levels include metals, carcinogenic polycyclic aromatic hydrocarbons, petroleum hydrocarbons, and dioxins/furans. However, a soil sample that is likely to be representative of soil exposed along the scarp, which was collected during the current investigation at a depth of 4 to 5 ft BGS just west of the bank stabilization area, did not indicate any exceedances of soil screening levels.

As the interim action only involves temporary stabilization of the eroding shoreline at Seafarers' Memorial Park, a summary table of environmental data for the Uplands Area has not been included in this work plan.

3.0 INTERIM ACTION

This section presents a summary of the evaluation, selection, and details of the interim action bank stabilization project.

3.1 PURPOSE OF THE INTERIM ACTION

The purpose of the interim action bank stabilization at Seafarers' Memorial Park is to temporarily protect the upper shoreline, the Park Building, and the beach area from further erosion, which could eventually result in exposure of potentially contaminated Uplands Area fill materials, until a more permanent means of protection can be studied and implemented, as determined necessary as part of the Marine Area RI/FS. This interim action meets the criteria of WAC 173-340-430(1), (2), and (3) for an interim action as described below.

The interim action is technically necessary to reduce the threat of further erosion of potentially contaminated materials, which could be a threat to human health or the environment. Seafarers' Memorial Park lies within an area currently under the Consent Decree, which outlines a Marine Area RI/FS to be completed at the South Basin Site. However, the completed study, along with a final cleanup action plan (if necessary), for the marine area defined in the Consent Decree may not be ready for the Port to utilize for another 2 to 5 years. If remedial action is delayed, continued erosion of the shoreline will occur, which may eventually expose potentially contaminated materials. Therefore, it is necessary to provide a means of temporarily (5-year design life) protecting the upper shoreline from erosion and halting the recession of the upper shoreline edge.

The interim action described in this work plan is not intended to provide cleanup, but will stabilize the shoreline until a cleanup action can be selected and implemented. This interim action will not foreclose reasonable alternatives for cleanup of the Property.

The Port will perform this interim action in accordance with the applicable provisions of the Consent Decree and the MTCA requirements for interim actions in WAC 173-340-430.

3.2 ALTERNATIVE INTERIM ACTIONS CONSIDERED

Alternatives that were considered included: 1) no action; 2) a "soft bank" stabilization approach; and 3) the riprap berm approach (the selected alternative).

The no action alternative was not selected because the subject shoreline has been observed to be undergoing intermittent erosion events, and the risk of further erosion and eventual exposure of potentially contaminated Uplands Area fill materials is considered unacceptable.

The soft bank alternative, which would stabilize the shoreline with the use of sand, gravel, beach logs, and natural vegetation, was not selected because it may provide insufficient protection against the relatively high erosion energy in the area. Additionally, the flatter slopes required would result in the loss of some of the upland grass area and potentially require relocation of the existing sidewalk near the Park building. The shoreline located just south of the eroding bank is currently stabilized with riprap, and the selected riprap berm alternative can be readily blended into the existing riprap slope. The soft bank approach will be evaluated as a potential means of providing more long-term erosion control in the shoreline area as part of the future Marine Area RI/FS.

3.3 INTERIM ACTION DESIGN AND CONSTRUCTION DETAILS

The interim action design consists of placement of a riprap berm and associated materials to stabilize the current bank erosion area. Design and construction details for the bank stabilization project are shown on Sheets 3 through 5 (taken from project permit documents) and on the bank stabilization construction drawings included in Appendix B.

The project area is situated above the mean higher high water (MHHW) elevation, which is 8.2 ft above MLLW. Erosion has created a near vertical scarp between the park lawn and the beach that is about 2-3 ft high in places, as shown on the photographs in Appendix A. The base of the scarp is estimated to be between Elevation +10 and +11.5 ft MLLW.

As indicated on Sheets 3 through 5, the bank will be stabilized by placement of a geotextile separation layer, gravel fill along the scarp, and a riprap berm. Some minor grading of the scarp and shoreline above MHHW will be conducted to prepare the subgrade in the bank stabilization area. It is anticipated that existing soil in the grading area will be redistributed along the scarp within the work area; however, some wooden and metal debris present on the beach within the construction area will be removed for disposal at an appropriate offsite solid waste disposal facility.

No construction activities are planned below MHHW, and conventional earthwork equipment (such as an excavator, backhoe, etc.) will be used during construction. Approximately 100-200 yd^3 of riprap and 20-25 yd^3 of gravel fill will be placed on the geotextile layer above the MHHW line to stabilize the bank and limit further erosion in the project area. Existing grass areas in the Park that are disturbed by construction equipment will be restored by regrading and placement of sod.

The current bank erosion area was previously located above the ordinary high water line (approximately Elevation +9.6 ft MLLW) prior to the recent erosion events. The new riprap berm will not extend below MHHW, but a portion of the toe of the berm will extend waterward of the ordinary high water line, as generally indicated on Sheets 4 and 5.

No in-water work will occur during construction of the riprap berm, and all work will be conducted upland of the MHHW line. Construction will occur from the upland portion of the site, and temporary erosion and sedimentation control measures will be implemented, as needed, during construction.

3.4 CONSTRUCTION TIMING

Bank stabilization construction activities are expected to take about 1 to 2 weeks to complete. It is currently anticipated that construction will occur in September or October 2004.

3.5 INTERIM ACTION CLEANUP LEVELS

No interim action cleanup levels are established for the bank stabilization project, as it will not involve the removal of any known contaminated materials associated with the Uplands Area.

3.6 HEALTH AND SAFETY PLAN

A health and safety plan has not been prepared for the bank stabilization project because the planned construction activities will not involve exposure to any known contaminated materials. However, the contractor will be required to prepare and implement a safety plan for the project.

3.7 COMPLIANCE MONITORING

The interim action bank stabilization project will not involve removal, handling, sampling, or exposure of any known contaminated materials associated with the Uplands Area. Accordingly, the MTCA compliance monitoring requirements in WAC 173-340-410 are not considered applicable and a compliance monitoring plan has not been developed for this interim action.

MTCA compliance monitoring activities typically include:

- Protection monitoring to confirm that human health and the environment are adequately protected during construction of the interim action, as described in a health and safety plan
- Performance monitoring to confirm that the interim action has attained the cleanup standards established for the project and other performance standards (such as construction quality control monitoring necessary to demonstrate compliance with project permits)
- Confirmational monitoring to confirm the long-term effectiveness of the interim action once the cleanup standards and other performance standards have been attained.

Protection monitoring is not required for this interim action because it will not involve exposure to any known contaminated materials being evaluated in the Uplands Area RI/FS. Rather, the interim

action is designed to temporarily protect the upper shoreline from further erosion and potential exposure of such materials.

Performance monitoring is not directly applicable because there are no specific cleanup standards, remediation levels, or performance standards associated with this interim action. However, construction quality control measurements will be made by the Contractor and construction quality assurance observations will be made by the Port and its representatives to document the work and confirm the contractor's conformance with the interim action construction requirements provided on the bank stabilization drawings included in Appendix B and the pertinent requirements of project permits.

Confirmational monitoring is not directly applicable because the interim action is intended to provide temporary stabilization of the eroding shoreline. However, the Port and its representatives will make periodic observations of the stabilized shoreline following significant storm events to confirm that further erosion is not occurring and that the interim action remains effective until a more permanent means of protection can be studied and implemented as determined necessary as part of the Marine Area RI/FS.

3.8 REPORTING

An interim action completion report will be prepared and submitted to Ecology following construction to document as-built conditions for the Seafarers' Memorial Park bank stabilization project.

4.0 USE OF THIS REPORT

This work plan has been prepared for the exclusive use of the Port of Anacortes for specific application to the Seafarers' Memorial Park bank stabilization project. No other party is entitled to rely on the information, conclusions, and recommendations included in this document without the express written consent of Landau Associates. Further, the reuse of information, conclusions, and recommendations provided herein for extensions of the project or for any other project, without review and authorization by Landau Associates, shall be at the user's sole risk. Landau Associates warrants that within the limitations of scope, schedule, and budget, our services have been provided in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions as this project. We make no other warranty, either express or implied.

This document has been prepared under the supervision and direction of the following key staff.

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5.0 REFERENCES

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